Curriculum Vitae

Linda R. Coney

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Education:

2000: **Ph.D., Physics, University of Notre Dame**
Thesis: "Diffractive W and Z Boson Production in $p\overline{p}$ Collisions at $\sqrt{s} = 1800$ GeV."
1997: **M.A., Physics, University of Notre Dame**
1993: **B.S., Physics and Mathematics (Magna Cum Laude), Hope College**

Academic Positions:

2005-2006: Fermilab Guest Scientist with Columbia University
2001-2005: Postdoctoral Research Associate, Columbia University
2000: Postdoctoral Research Associate, University of Notre Dame
1993-2000: Graduate Student, University of Notre Dame
1995-2000: Research Assistant
1994-1995: Teaching Assistant
1993-1994: Arthur J. Schmitt Presidential Fellow
1991-1993: Teaching Assistant, Hope College
1990-1993: Research Assistant, Atomic Physics Group, Hope College

Awards:

Arthur J. Schmitt Presidential Fellowship, University of Notre Dame, 1993-1994
Douwe B. Yntema Prize in Physics, Hope College, 1993
Senior Sigma Xi Award for Physics, Hope College, 1993
Phi Beta Kappa Honor Society, Hope College, 1993

Professional Committees:

2004-2005: APS Neutrino Study Booklet Committee
2002-2003: Organizing Committee, NuFact03 Workshop
2001: Young Physicist Forum Committee member, Snowmass 2001
2001-present: Young Particle Physicists (YPP) member
1997-1999: Fermilab Users' Executive Committee member
Chair of Quality of Life Subcommittee
Chair of Younger Physicists Issues Subcommittee
Outreach and Education Subcommittee member
Annual Users' Meeting Subcommittee member

Research Experience:

- MiniBooNE Experiment (E898), member 2001-present: MiniBooNE is a neutrino experiment at Fermilab designed to look for oscillations from muon neutrinos to electron neutrinos. The Fermilab Booster provides an intense beam of protons onto a target producing pions which decay and result in a beam of muon neutrinos. These neutrinos are directed toward the MiniBooNE detector where a search for electron neutrinos is performed.
  - Participated in HARP experiment to measure pion production on MiniBooNE target and reduce systematic uncertainties on MiniBooNE neutrino flux.
  - Led Columbia University HARP group and guided tasking of graduate students.
  - Supervised data taking at HARP for MiniBooNE.
  - Tested and developed diagnostic system to monitor accelerator devices in Booster and identify instabilities.
  - Integrated new diagnostic system into permanent data logger to allow long term machine performance studies.
  - Participated in project to use ramped dipole correctors in Booster to control beam motion. Used new correctors to reduce beam losses near sensitive equipment.
  - Explored resonant extraction of beam halo as method to reduce uncontrolled beam loss.
  - Performed muon cooling beam simulations to test neutrino factory designs.
  - Authored and edited technical documents using Latex, MS Powerpoint, MS Word, and Adobe Illustrator.
  - Experienced in UNIX, LINUX, Microsoft Windows NT, VMS, Fortran, C++, JAVA, HTML, GEANT4, ICOOL, emacs, vi, CVS, LSF, and data analysis languages (ROOT, PAW).
- HARP (Hadron Production Experiment at CERN - PS214) member 2001-present: HARP is a fixed target experiment at the CERN PS. This large acceptance spectrometer is used to systematically study hadron production for protons incident upon a large range of target nuclei. Specifically, pi^+ and pi^- production cross sections are measured directly from the MiniBooNE target to reduce systematic uncertainties on the MiniBooNE neutrino flux.
  - Enabled measurement of cross section backgrounds by identifying need for empty target data for each HARP target.
  - Ensured high data quality by calculating appropriate beam settings and monitoring spectrometer detectors.
  - Led HARP Production Group which provided data and Monte Carlo samples to entire experiment for calibration and analysis purposes.
  - Contributed to measurement of pi^+ production cross section in p-Al collisions at 12.9 GeV/c which will be used to reduce systematic error in K2K neutrino flux.
  - Coordinated data management on three continents while maintaining data quality and consistency of production methods.

  - Developed system to enable remote-site HARP analysis at Fermilab, Los Alamos National Lab, and universities in Europe and Japan.
  - Created accurate material geometries for HARP GEANT4 simulation code.
  - Analyzed, tuned, and validated simulations of HARP threshold Cerenkov detector.
  - Developed particle momentum estimator to increase number of available tracks in cross section calculation.

- DØ Experiment, member 1995-2004: DØ is a collider experiment at the Fermilab Tevatron where studies are done on phenomena resulting from $p\overline{p}$ collisions at a center of mass energy of nearly 2 TeV. The detector is geared primarily toward the investigation of large p_T phenomena. Top quark analyses, precision measurements of W and Z bosons, perturbative QCD testing, and new hard diffraction studies are all done at DØ .

  - Identified first diffractive Z boson production in $p\overline{p}$ collisions.
  - Measured diffractive component of W and Z boson production in $p\overline{p}$ collisions.
  - Developed extensive Monte Carlo (PYTHIA, POMPYT26) studies to investigate validity of pomeron exchange as driving mechanism for diffractive W and Z production.
  - Calculated diffractive dijet production rates predicted by pomeron models using PYTHIA and POMPYT26 for the hard single diffraction analysis.
  - Discovered miscalculation of reconstructed photon energies which degraded calibration of jet response.
  - Implemented photon energy scale correction which dramatically improved DØ jet response calculation.
  - Directed Central Fiber Tracker(CFT) fiber lightguide quality control project.
  - Developed testing procedure using X-ray source and scintillating fiber ribbons to measure production quality of lightguides fabricated for CFT.
  - Performed light attenuation and radiation damage studies on scintillating fibers.

Teaching Experience:

- Supervised REU undergraduate students working on accelerator physics for MiniBooNE.
- Taught scientific method and research documentation techniques to high school teachers in the Quarknet and Fermilab TRAC (Teacher Research Associates) program.
- Lectured at engineering physics review sessions.
- Instructed introductory level physics labs for pre-med and engineering students.

Communications and Administration:

- Organized and hosted NuFact03 conference at Columbia University.
- Addressed members of Congress, Presidential Budget Office representatives, and Department of Energy personnel to promote high energy physics research done Fermilab.

- Planned and ran 1998-1999 annual Fermilab Users' Meeting.
- Instituted and organized accelerator overview lecture series at Fermilab.
- Conceptualized and organized accelerator physics summer school at Fermilab.
- Arranged career planning workshop for Fermilab graduate students and post-docs.

Conference and Workshop participation:

- 2005: Workshop on the Future of Nuclear Physics at LANSCE, Los Alamos
- 2004: Meeting of the Division of Particles and Fields: DPF 2004
- 2004: Neutrino 2004
- 2003: Neutrino Factory Workshop 2003: NuFACT 2003
- 2003: Particle Accelerator Conference (PAC): 2003
- 2002: Neutrino Factory Workshop 2002 : NuFACT 2002
- 2001: US Particle Accelerator School (USPAS) Winter 2002
- 2001: Particle Accelerator Conference (PAC): 2001
- 2001: US Particle Accelerator School (USPAS) Summer 2001
- 2001: Snowmass 2001: E1, M1, T3 Working group member

Conference Presentations and Seminars

- Los Alamos National Laboratory, P-25 Seminar, June 2006: *Recent Results from the HARP Experiment*
- Meeting of the Division of Particles and Fields (DPF2004), Riverside, CA, August 2004: *HARP for MiniBooNE*
- Rutherford Appleton Laboratory, Particle Physics Seminar, Didcot, England, June 2004: *Status Report on the MiniBooNE Experiment*
- Fermi National Accelerator Laboratory, Summer Student Seminar, July 2003: *The HARP Experiment and MiniBooNE*
- Particle Accelerator Conference (PAC2003), Portland, OR, May 2003: *Fermilab Booster Orbit Correction*
- National Science Foundation, Accelerator Physics at Universities, Washington D.C., April 2003: *Columbia University Accelerator Physics*
- 4th International Workshop on Neutrino Factories based on Muon Storage Rings (NuFACT02), Imperial College, London, England, July 2002: *MiniBooNE Beam Systematics*

- Los Alamos National Laboratory, P-25 Seminar, April 2002: *Diffractively Produced W and Z Bosons*
- Columbia University, Physics Graduate Student Seminar, New York, NY, March 2002: *Neutrino Factory: International Muon Ionization Cooling Experiment*
- APS/DPF/DPB Summer Study on the Future of Particle Physics (Snowmass 2001), Snowmass, CO, July 2001: *Young Particle Physicists (YPP) Outreach: Plans and Conclusions*
- XIth Rencontres de Blois - Frontiers of Matter, Chateau de Blois, France, June 1999: *Hard Diffraction at the Tevatron*
- APS Centennial Meeting, Atlanta, Georgia, March 1999: *Diffractive W Production at DØ*
- APS/AAPT Joint Meeting, Columbus, OH, April 1998: *Hard Diffraction at DØ*
- APS/AAPT Joint Meeting, Indianapolis, IN, May 1996: *The Hadronic Energy Scale of DØ Calorimetry*

Outreach Activities

- 2005: Hosted second annual Fermilab Girl Scout Workshop. Led "Ask a Scientist" and explained lab scientific activities to over 100 grade school and high school scouts.
- 2005: Served as scientific advisor to "Science and Religion" class held at First Reformed Church of Holland, MI.
- 2005: Judged middle school science fair at Neuqua Valley High School in Naperville, IL.
- 2004: Participated in first Fermilab Girl Scout Workshop.
- 2004: Lectured Hope College physics and engineering majors visiting Fermilab on particle physics and accelerators at Fermilab.
- 2003: Led Girls Scientific Salon at Fermilab involving junior high school girls in hands-on physics experiments.
- 2002: Tutored for Partners in Education (PIE) program for children living in economically disadvantaged neighborhoods in Chicago through Fourth Presbyterian Church.
- 2002: Created and performed interactive demonstration program on Light and Color geared toward grade school students.
- 2001-2002: Developed National Science Foundation proposal with YPP to create and distribute particle physics instructional kits for primary school students.

Publications in Refereed Journals:

- "Measurement of the production cross-section of positive pions in p - Al collisions at 12.9 GeV/c", M. G. Catanesi *et al.*(HARP Collaboration), Nuclear Physics B **732**, (2006).

- "Observation of diffractively produced W and Z bosons in $p\bar{p}$ Collisions at $\sqrt(s) = 1.8$ TeV", V. M. Abazov *et al.*, Phys. Lett. B **574**, 169 (2003); hep-ex/0308032, FERMILAB-PUB-03-233-E.

- "Hard Single Diffraction in $p\bar{p}$ Collisions at $\sqrt{s} = 630$ and 1800 GeV", B. Abbott *et al.*, Phys. Lett. B **531**, 52 (2002); FERMILAB-Pub-99/373-E; hep-ex/9912061.

- "The ratio of jet cross sections at $\sqrt(s)$=630 and 1800 GeV", B. Abbott *et al.*, Phys. Rev. Lett. 86, 2523 (2001); FERMILAB-Pub-00/213-E, hep-ex/0008072.

- "Extraction of the width of the W boson from measurements of $\sigma(p\bar{p} \to W+X) \times \mathrm{Br}(W \to e\nu)$ and $\sigma(p\bar{p} \to Z + X) \times \mathrm{Br}(Z \to ee)$ and their ratio", B. Abbott *et al.*, Phys. Rev. D **61**, 072001 (2000); FERMILAB-Pub-99/171-E; hep-ex/9906025.

- "The Inclusive Jet Cross Section in $\overline{p}p$ Collisions at $\sqrt{s} = 1.8$ TeV", B. Abbott *et al.*, Phys. Rev. Lett. **82**, 2451 (1999); FERMILAB-Pub-98/207-E; hep-ex/9807018.

- "Determination of the Absolute Jet Energy Scale in the DØ Calorimeters", B. Abbott *et al.*, Nucl. Instrum. Methods Phys. Res. A**424**, 352 (1999); FERMILAB-Pub-97/330-E; hep-ex/9805009.

- "Probing hard color-singlet exchange in $\overline{p}p$ collisions at $\sqrt{s}$=630 GeV and 1800 GeV.", B. Abbott *et al.*, Phys. Lett. B **440**, 189 (1998); FERMILAB-Pub-98/285-E; hep-ex/9809016.

- "Search for 3- and 4-Body Decays of the Scalar Top Quark in Proton- Antiproton Collisions at $\sqrt{s} = 1.8$ TeV", V. M. Abazov *et al.*, Phys. Lett. B **581**, 144 (2004); FERMILAB-PUB-03-306-E.

- "Multiple jet production at low transverse energies in $p\bar{p}$ collisions at $\sqrt{s} = 1.8$ TeV", V. M. Abazov *et al.*, Phys. Rev. D **67**, 052001 (2003); FERMILAB-Pub-02/153-E, hep-ex/0207046.

- "Search for large extra dimensions in the monojet + $\not\!\!E_T$ channel with the DØ detector", V. M. Abazov *et al.*, Phys. Rev. Lett. **90**, 251802 (2003); hep-ex/030214.

- "$t\bar{t}$ production cross section in $p\bar{p}$ collisions at $\sqrt{s} = 1.8$ TeV", V. M. Abazov *et al.*, Phys. Rev. D **67**, 012004 (2003); hep-ex/0205019.

- "Subjet multiplicity of gluon and quark jets reconstructed with the $k_\perp$ algorithm in $p\bar{p}$ collisions", V. M. Abazov *et al.*, Phys. Rev. D **65**, 052008 (2002); FERMILAB-Pub-01/248-E; hep-ex/010854.

- "The inclusive jet cross section in $p\bar{p}$ collisions at $\sqrt{s} = 1.8$ TeV using the $k_\perp$ algorithm", V. M. Abazov *et al.*, Phys. Lett. B **525**, 211 (2002); FERMILAB-Pub-01/290; hep-ex/019041.

- "Search for R-parity violating supersymmetry in two-muon and four-Jet Channel", V. M. Abazov *et al.*, Phys. Rev. Lett. **89**, 171801 (2002), FERMILAB-Pub-01/352-E; hep-ex/0111053.
- "Search for Leptoquark Pairs Decaying to $\nu\nu$+ jets in $p\bar{p}$ Collisions at $\sqrt{s}$ = 1.8 TeV", V. M. Abazov *et al.*, Phys. Rev. Lett. **88**, 191801 (2002); FERMILAB-Pub-01/349-E; hep-ex/0111047.
- "A direct measurement of the W boson width", V. M. Abazov *et al.*, Phys. Rev. D **66**, 032008 (2002); FERMILAB-Pub-02/063-E, hep-ex/0204009.
- "Improved W boson mass measurement with the DØ detector", V. M. Abazov *et al.*, Phys. Rev. D **66**, 012001 (2002); FERMILAB-Pub-02/055-E, hep-ex/0204014.
- "Search for minimal supergravity in single electron events with jets and large missing transverse energy in $p\bar{p}$ collisions at $\sqrt{s}$ = 1.8 TeV, V. M. Abazov *et al.*, Phys. Rev. D **66**, 112001 (2002); FERMILAB-Pub-02/074-E, hep-ex/0205002.
- "Search for production of single sleptons through R-Parity violation in $p\bar{p}$ collisions at $\sqrt{s}$ = 1.8 TeV", V. M. Abazov *et al.*, Phys. Rev. Lett **89**, 261801 (2002); hep-ex/0207100.
- "A search for the scalar top quark in $p\bar{p}$ collisions at $\sqrt{s}$ = 1.8 TeV", V. M. Abazov *et al.*, Phys. Rev. Lett. **88**, 171802 (2002); FERMILAB-Pub-01/233-E, hep-ex/0108018.
- "Direct Search for Charged Higgs Bosons in Decays of Top Quarks", V. M. Abazov *et al.*, Phys. Rev. Lett. **88**, 151803 (2002); FERMILAB-Pub-01/022-E; hep-ex/0102039.
- "Search for Large Extra Dimensions in Dielectron and Diphoton Production", B. Abbott *et al.*, Phys. Rev. Lett. 86, 1156 (2001); FERMILAB-Pub-00/210-E, hep-ex/0008065.
- "Ratios of Multijet Cross Sections in $p\bar{p}$ Collisions at $\sqrt{(}s)$=1800 GeV", B. Abbott *et al.*, Phys. Rev. Lett. 86, 1955 (2001); FERMILAB-Pub-00/218-E, hep-ex/0009012.
- "Measurement of the Angular Distribution of Electrons from $W \rightarrow e\nu$ Decays Observed in $p\bar{p}$ Collisions at $\sqrt{s}$ = 1.8 TeV", B. Abbott *et al.*, Phys. Rev. D **63**, 072001 (2001); FERMILAB-Pub-00/228-E, hep-ex/0009034.
- "Differential Cross Section for W Boson Production as a function of Transverse Momentum in $p\bar{p}$ Collisions at $\sqrt{s}$ = 1.8 TeV", B. Abbott *et al.*, Phys. Lett. B **513**, 292, (2001). FERMILAB-Pub-00/268-E,hep-ex/0010026.
- "Inclusive jet production in $p\bar{p}$ collisions", B. Abbott *et al.*, Phys. Rev. Lett. **86**, 1707 (2001); FERMILAB-Pub-00/271-E, hep-ex/0011036.
- "A Quasi-Model-Independent Search for New High p_T Physics at DZero", B. Abbott *et al.*, Phys. Rev. Lett. **86**, 3712 (2001); FERMILAB-Pub-00/304-E; hep-ex/0011071.

- "A Quasi-Model Independent Search for New Physics at Large Transverse Momentum", V. M. Abazov *et al.*, Phys. Rev. D **64**, 012004 (2001); FERMILAB-Pub-00/302-E, hep-ex/0011067.
- "High-p_T Jets in $p\bar{p}$ Collisions at $\sqrt{s} = 630$ and 1800 GeV", B. Abbott *et al.*, Phys. Rev. D **64**, 032003 (2001); FERMILAB-Pub-00/216-E, hep-ex/0012046.
- "Search for Heavy Particles Decaying into Electron-Positron Pairs in $p\bar{p}$ Collisions", V. M. Abazov *et al.*, Phys. Rev. Lett. **87**, 061802 (2001); FERMILAB-Pub-01/024-E; hep-ex/0102048.
- "Search for First-Generation Scalar and Vector Leptoquarks", V. M. Abazov *et al.*, Phys. Rev. D **64**, 092004 (2001); FERMILAB-Pub-01/057-E; hep-ex/0105072.
- "Search for New Physics Using QUAERO: A General Interface to DZero Data", V. M. Abazov *et al.*, Phys. Rev. Lett. **87**, 012004 (2001); FERMILAB-Pub-01/105-E; hep-ex/0106039.
- "Search for Single Top Production at DZero Using Neural Networks", V. M. Abazov *et al.*, Phys. Lett. B **517**, 282 (2001); FERMILAB-Pub-01/102-E; hep-ex/0106059.
- "Measurement of the ratio of differential cross sections for W and Z boson production as a function of transverse momentum", V. M. Abazov *et al.*, Phys. Lett. B. **517**, 299 (2001); FERMILAB-Pub-01/212-E, hep-ex/0107102.
- "The ratio of isolated photon cross sections in $p\bar{p}$ collisions at $\sqrt{s} = 630$ and 1800 GeV", V. M. Abazov *et al.*, Phys. Rev. Lett. **87**, 251805 (2001); FERMILAB-Pub-01/239-E, hep-ex/0106026.
- "Search for Electroweak Production of Single Top Quarks in pbarp Collisions", B. Abbott *et al.*, Phys. Rev. D Rapid Comm. **63** 031101 (2001); FERMILAB-Pub-00/188-E, hep-ex/000824.
- "A Search for Dilepton Signatures from Minimal Low-energy Supergravity in $p\bar{p}$ Collisions at $\sqrt{s} = 1.8$ TeV", B. Abbott *et al.*, Phys. Rev. D Rapid Comm. **63**, 091102 (2001); FERMILAB-Pub-00/042-E; hep-wx/9907048v2.
- "The $b\bar{b}$ production cross section and angular correlations in $\overline{p}p$ collisons at $\sqrt{s} = 1.8$ TeV", B. Abbott *et al.*, Phys. Lett. B **487**, 264 (2000); FERMILAB-Pub-99/144-E; hep-ex/9905024.
- "Measurement of the inclusive differential cross section for Z bosons as a function of transverse momentum produced in $\overline{p}p$ collisions at $\sqrt{s} = 1.8$ TeV", B. Abbott *et al.*, Phys. Rev. D **61**, 032004 (2000); FERMILAB-Pub-99/197-E; hep-ex/9907009.
- "Small angle muon and bottom quark production in $\overline{p}p$ collisions at $\sqrt{s} = 1.8$ TeV", B. Abbott *et al.*, Phys. Rev. Lett. 84, 5478 (2000); FERMILAB-Pub-99/202-E; hep-ex/9907029.

- "A measurement of the W boson mass using large rapidity electrons", B. Abbott *et al.*, Phys. Rev. D **62** 092006, (2000); FERMILAB-Pub-99/237-E; hep-ex/9908057.
- "Differential production cross section of Z bosons as a function of transverse momentum at $\sqrt{s} = 1.8$ TeV", B. Abbott *et al.*, Phys. Rev. Lett. **84**, 2792 (2000); hep-ex/9909020.
- "A measurement of the W boson mass using electrons at large rapidities", B. Abbott *et al.*, Phys. Rev. Lett. 84, 222 (2000); FERMILAB-Pub-99/259-E; hep-ex/9909030.
- "Search for second generation leptoquarks in $\overline{p}p$ collisions at $\sqrt{s} = 1.8$ TeV", B. Abbott *et al.*, Phys. Rev. Lett. **84**, 2088 (2000); FERMILAB-Pub-99/314-E; hep-ex/9910040.
- "The isolated photon cross section in $\overline{p}p$ collisions at $\sqrt{s} = 1.8$ TeV", B. Abbott *et al.*, Phys. Rev. Lett. **84**, 2786 (2000); FERMILAB-Pub-99/354-E; hep-ex/9912017.
- "Probing BFKL Dynamics in Dijet Cross Section at Large Rapidity Intervals in $p\bar{p}$ Collisions at $\sqrt{s} = 1800$ and 630 GeV", B. Abbott *et al.*, Phys. Rev. Lett. 84, 5722 (2000); FERMILAB-Pub-99/363-E; hep-ex/9912032.
- "Limits on Anomalous $WW\gamma$ and WWZ Couplings from $WW/WZ \to e\nu$jj Production", B. Abbott *et al.*, Phys. Rev. D **62**, 052005 (2000); hep-ex/9912033.
- "A measurement of the $W \to \tau\nu$ Production Cross Section in $p\bar{p}$ Collisions at $\sqrt{s} = 1.8$ TeV", B. Abbott *et al.*, Phys. Rev. Lett. 84, 5710 (2000); FERMILAB-Pub-99/373-E; hep-ex/9912065.
- "Limits on Quark Compositeness from High Energy Jets in $p\bar{p}$ Collisions at 1.8 TeV", B. Abbott *et al.*, Phys. Rev. D Rapid Communication **62**, 031101 (2000); FERMILAB-Pub-99/357-E; hep-ex/9912023.
- "Spin Correlation in $t\bar{t}$ Production from $p\bar{p}$ Collisions at $\sqrt{s} = 1800$ GeV", B. Abbott *et al.*, Phys. Rev. Lett. **85**, 256 (2000), FERMILAB-Pub-00/046-E, hep-ex/0002058.
- "Search for R-parity Violation in Multilepton Final States in pbarp Collisions at $\sqrt{s} = 1.8$ TeV", B. Abbott *et al.*, Phys. Rev. D Rapid Comm. **62**, 071701 (2000); FERMILAB-Pub-00/109-E, hep-ex/000534.
- "Search for New Physics in $e\mu X$ Data at DØ Using Sleuth: A Quasi-Model-Independent Search Strategy for New Physics", B. Abbott *et al.*, Phys. Rev. D **62**, 92004 (2000); FERMILAB-Pub-00/126-E, hep-ex/0006011.
- "Cross Section for b jet production in pbarp collisions at $\sqrt(s) = 1.8$ TeV", B. Abbott *et al.*, Phys. Rev. Lett. 85, 5068 (2000); FERMILAB-Pub-00/197-E, hep-ex/0008021.
- "The Dijet Mass Spectrum and a Search for Quark Compositeness in $\overline{p}p$ Collisions at $\sqrt{s} =$ 1.8 TeV", B. Abbott *et al.*, Phys. Rev. Lett. **82**, 2457 1999; FERMILAB-Pub-98/220-E; hep-ex/9807014.

- "Small Angle J/Psi Production in $\overline{p}p$ Collisions at $\sqrt{s}$=1.8 TeV", B. Abbott *et al.*, Phys. Rev. Lett. **82**, 35 (1999); FERMILAB-Pub-98/237-E; hep-ex/9807029.
- "Measurement of the Top Quark Mass in the Dilepton Channel", B. Abbott *et al.*, Phys. Rev. D **60**, 052001 (1999); FERMILAB-Pub-98/261-E; hep-ex/9808029.
- "Search for Squarks and Gluinos in Single-Photon Events with Jets and Large Missing Transverse Energy in $\overline{p}p$ Collision at $\sqrt{s}$=1.8 TeV", B. Abbott *et al.*, Phys. Rev. Lett. **82**, 29 (1999); FERMILAB-Pub-98/243-E; hep-ex/9808010.
- "Measurement of the Top Quark Pair Production Cross Section in $\overline{p}p$ Collisions using Multijet Final States", B. Abbott *et al.*, Phys. Rev. D **60**, 012001 (1999); FERMILAB-Pub-98/130-E; hep-ex/9808034.
- "Search for nonstandard Higgs bosons using high mass photon pairs in $\overline{p}p \rightarrow \gamma\gamma + 2$ jets at $\sqrt{s} = 1.8$ TeV", B. Abbott *et al.*, Phys. Rev. Lett. **82**, 2244 (1999); FERMILAB-Pub-98/362-E; hep-ex/9811029.
- "Measurement of high-mass Drell-Yan cross section and limits on quark-electron compositeness scales", B. Abbott *et al.*, Phys. Rev. Lett. **82**, 4769 (1999); FERMILAB-Pub-98/391-E; hep-ex/9812010.
- "Measurement of W and Z boson production cross sections (Run 1a), B. Abbott *et al.*, Phys. Rev. D **60**, 052003 (1999); FERMILAB-Pub-99/015-E; hep-ex/9901040.
- "Search for charged Higgs bosons in decays of top quark pairs", B. Abbott *et al.*, Phys. Rev. Lett. **82**, 4975 (1999); FERMILAB-Pub-99/029-E; hep-ex/9902028.
- "Search for bottom squarks in $\overline{p}p$ collisions at $\sqrt{s} = 1.8$ TeV", B. Abbott *et al.*, Phys. Rev. D **60** Rapid Communications, 031101 (1999); FERMILAB-Pub-99/046-E; hep-ex/99030041.
- "Measurement of the top quark pair production cross section in the all-jets decay channel", B. Abbott *et al.*, Phys. Rev. Lett. **83**, 1908 (1999); FERMILAB-Pub-99/008-E; hep-ex/9901023.
- "Search for squarks and gluinos in events containing jets and a large imbalance in transverse momentum", B. Abbott *et al.*, Phys. Rev. Lett. **83**,4937 (1999); FERMILAB-Pub-98/402-E; hep-ex/9902013.
- "Studies of WW and WZ production and limits on anomalous $WW\gamma$ and WWZ couplings", B. Abbott *et al.*, Phys. Rev. D **60**, 072002 (1999); FERMILAB-Pub-99/139-E; hep-ex/9905005.
- "Evidence of color coherence effects in W+jets events from $\overline{p}p$ collisions at $\sqrt{s} = 1.8$ TeV", B. Abbott *et al.*, Phys. Lett. B **464**, 145 (1999); FERMILAB-Pub-99/224-E; hep-ex/9908017.

- "Search for second generation leptoquark pairs decaying into $\mu\nu+$ jets in $\overline{p}p$ collisions at $\sqrt{s}$ = 1.8 TeV", B. Abbott *et al.*, Phys. Rev. Lett.**83**, 2896 (1999); FERMILAB-Pub-99/123-E; hep-ex/9904023.

- "Search for R-parity violation supersymmetry in the dielectron channel", B. Abbott *et al.*, Phys. Rev. Lett. **83**, 4476 (1999); FERMILAB-Pub-99/200-E; hep-ex/9907019.

- "Search for First Generation Scalar Leptoquark Pairs in $\overline{p}p$ Collisions at $\sqrt{s}$ = 1.8 TeV", B. Abbott *et al.*, Phys. Rev. Lett. **80**, 2051 (1998); FERMILAB-Pub-97/344-E; hep-ex/9710032.

- "A Measurement of the W Boson Mass at the FERMILAB $p\bar{p}$ Collider .", B. Abbott *et al.*, Phys. Rev. Lett. **80**, 3008 (1998); FERMILAB-Pub-97/423-E; hep-ex/9712028.

- "A measurement of the W boson mass", B. Abbott *et al.*, Phys. Rev. D **58**, 092003 (1998); FERMILAB-Pub-97/422-E; hep-ex/9712029.

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